Frederick Kuehn is currently a postdoctoral researcher in the Fermilab Center for Particle Astrophysics. He attended the University of Toronto as an undergraduate in Mathematics and Physics where he obtained his B.Sc. (‘01). He then went on to Ohio State to complete his Masters (‘05), working with Barbara Ryden to understand SDSS galaxy properties, and PhD (‘08) where he worked with Brian Winer and Richard Hughes, creating and shaping the Onboard Science program for the Fermi Gamma Ray Space Telescope, while focusing on Gamma Ray Burst detection at high energies and the implications of light propagation for fundamental physics.

At Fermilab, he is currently working on understanding nature’s highest energy particles as a member of the Pierre Auger Collaboration. His primary contributions focus on improving a detailed understanding of detector performance, and of analysis tools. As a member of the AirFly Collaboration, his work focuses on understanding the effects of the passage of charged particles through air, a key measurement used to calibrate the Auger Fluorescence Detector energy scale.

As a postdoc at Fermilab, he has recently lead a Quarknet MasterClass guiding high school students through a day as a high energy physicist, as well as engaging with middle school students on life as a physicist at Fermilab. As a graduate student, he was a member of the Ohio State Policy and Standards Committee; the Physics Graduate Student Committee; has created a graduate student seminar series; has founded an annual graduate student poster competition; has started a computer library for graduate students; was a mentor for the Ohio State Mount Leadership Society; was an instructor in the GRASP Ohio State Girls Summer Science Camp; has lectured to high school students; has volunteered during the Festival of Physics at the Center Of Science and Industry Columbus.